

46. (New) The method of claim 45 wherein the protein phosphatase 2C is recombinantly produced.

47. (New) The method of claim 46 wherein the protein phosphatase 2C is protein phosphatase 2C $\alpha$ .

48. (New) The method claim 46 wherein the protein phosphatase 2C is protein phosphatase 2C  $\beta$ .

*sub c?*  
*B/C*  
*and*

~~49. (New) The method of claim 45 wherein said introducing step further includes administering the protein phosphatase into the cancerous cell by a vector.~~

50. (New) The method of claim 49 wherein the vector comprises an expression control sequence operatively linked to the nucleic acid sequence of protein phosphatase 2C.


51. (New) The method of claim 50 wherein the protein phosphatase 2C is protein phosphatase 2C $\alpha$ .

52. (New) The method claim 50 wherein the protein phosphatase 2C is protein phosphatase 2C $\beta$ .

53. (New) A method of treating cancer including the steps of

(a) determining the type of cancer and cells expressing the cancer; and

(b) introducing a therapeutic amount of protein phosphatase 2C into the cancerous cell.

 54. (New) The method of claim 53 wherein the protein phosphatase 2C is recombinantly produced.

55. (New) The method of claim 53 wherein the protein phosphatase 2C is protein phosphatase 2C $\alpha$ .

56. (New) The method of claim 53 wherein the protein phosphatase 2C is protein phosphatase 2C $\beta$ .

57. (New) The method of treating a cancerous cell which comprises introducing a therapeutic amount of protein phosphatase 2C into the cancerous cell.

58. (New) The method of claim 57 wherein the protein phosphatase 2C is recombinantly produced.

59. (New) The method of claim 58 wherein the protein phosphatase 2C is protein phosphatase 2C $\alpha$ .

60. (New) The method of claim 59 wherein the protein phosphatase 2C is protein phosphatase 2C $\beta$ .

61. (New) Protein phosphatase 2C for use in the treatment of cancer.

62. (New) The protein phosphatase 2C of claim 61 wherein the protein phosphatase 2C is recombinantly produced.

63. (New) The protein phosphatase 2C of claim 62 wherein the protein phosphatase 2C is protein phosphatase 2C $\alpha$ .

64. (New) The protein phosphatase 2C of claim 62 wherein the protein phosphatase 2C is protein phosphatase 2C $\beta$ .

65. (New) A method of treating cancer including the steps of

B1  
Cont

Sub  
C2

Sub  
C2

(a) determining the type of cancer and cells expressing the cancer;

(b) preparing a vector which will specifically target the cancer cells including regulatory elements to control the expressibility of protein phosphatase 2C, and

(c) administering the vector to the patient.

B1  
Cont

66. (New) A method of claim 65 wherein the protein phosphatase 2C is protein phosphatase 2C $\alpha$ .

67. (New) A method of claim 65 wherein the protein phosphatase 2C is protein phosphatase 2C $\beta$ .

### REMARKS

Restriction to one of the follow groups was required under 35 U.S.C.

§121:

Group 1, claim(s) 1-4, 8, 13-15, drawn to a method of detecting cancerous cells in a patient by detecting alterations of PP2C alpha with methods related to detecting nucleic acids.

Group 2, claim(s) 1, 25-7, 9, 10, 23, 24, drawn to a method of detecting cancerous cells in patients by detecting alteration of PP2C alpha with methods related to detecting polypeptides.